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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION N
09/825,786	04/04/2001	Gerald W. Mills	723.035US1	1321
21186	7590	10/21/2004	EXAMINER	
SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.			JUNG, WILLIAM C	
P.O. BOX 2938			ART UNIT	
MINNEAPOLIS, MN 55402			PAPER NUMBER	
			3737	

DATE MAILED: 10/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/825,786

Applicant(s)

MILLS ET AL.

Examiner

William Jung

Art Unit

3737

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 10-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments filed January 5, 2004 have been fully considered but they are not persuasive. In regard to paragraphs 2-4, page 8 of the remark: The applicant asserts that Rapoport's device is restricted to lateral location of joint 25. However, Rapoport shows in figures 6 and 7 where the joint 25 is controlled with motor 30 and 332 where the joint 25 can be placed anywhere along the surface defined by plate 27. In addition, element 33 controls the height of the insertion platform. Therefore, the applicant is wrong to point out that Rapoport's device is confined to lateral movement. Also, Rapoport's device do not explicitly point out remote control module, it is inherent from flow chart shown in figure 2 where the position of the insertion joint 25 is in direct communication with imaging device such as MRI and calculate the desired slope of entry 145. Therefore, Rapoport supports all claimed elements in claims 10 and 20.

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 10-15, 19, and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated by *Rapoport* (US 5,598,845).

Claims 10, 11, 20, and 22: Rapoport discloses of an alignment device where it guides insertion of surgical tools through the guiding tube 28 as shown in figures 5-7 (col. 7, lines 54-67). The insertion guide is mounted to a base or support frame 23 and the movement of the insertion guide is controlled via remote control module or control computer 90 (col. 7, lines 37-50). The movement of the insertion guide is achieved via detachable swivel mechanism or actuator with adjustable joint 25 (col. 7, lines 20-36).

Claims 12 and 21: Rapoport further discloses of above system specifically in use for positioning of the insertion device about the skull in conjunction with MRI scan (col. 2, lines 36-60).

Claims 13-15, and 19: Rapoport discloses of inserting location marker or reference device M1, M2, M3, and so forth where these markers are located in three dimensional data as shown in figure 2 (col. 6, lines 11-57, figure 2; col. 7, line 54 – col. 8, line 61).

***Claim Rejections - 35 USC § 103***

4: The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 16 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over ***Rapoport*** as applied to claims 10 and 13 above, and further in view of ***Truwit*** (US 5,993,463).

***Rapoport*** substantially discloses of all claimed invention in claims 16 and 17 where the insertion guide has small opening where the light source marks the position of entry for the insertion device. ***Truwit*** further teaches that the many surgical tools for insertion to a patient includes

Art Unit: 3737

infrared (IR) or light emitting diode (LED) attached to the instrument to identify the position.

Truwit also discloses that the such a device described above can be mounted to a stereotaxy device used to introduce surgical tool to the patient's skull (col. 2, lines 15-37). Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of Rapoport to the teachings of Truwit to achieve the claimed invention.

6. Claims 18 and 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Rapoport* as applied to claims 10 and 13 above, and further in view of *Lee et al* (US 3,893,449).

*Rapoport* substantially disclose of all claimed invention in claims 18 and 23-26. Lee et al discloses of an imaging device placed on a patient with remote control of the device to align the imaging device to an appropriate location. Lee et al also teaches that the location of the medical device such as ultrasound is referenced to identify the position using potentiometer (col. 1, line 59 – col. 2, line 11). Lee et al also disclose in figures 2 and 11 where the control mechanism includes pin joint actuator with rotary motor with rotating cable drive (col. 5, lines 36-64). Therefore, it would have been obvious to one having an ordinary skill in the art at the time the invention was made to apply the teachings of Rapoport's aligning imaging device to teachings of Lee et al's position referencing system to achieve the claimed invention.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Art Unit: 3737

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Jung, Ph.D. whose telephone number is 703-605-4364.

The examiner can normally be reached on Mon-Fri 8:30 AM to 5 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Casler can be reached on 703-308-3552. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

2005  
October 16, 2004

  
BRIAN L. CASLER  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700